

ABSTRACT OF THE DISCLOSURE

Pluralities of pixel electrodes having openings and thin film transistors are provided on a lower panel, a common electrode having apertures is provided on an upper panel, and a liquid crystal layer vertically aligned to the two panels is located between the lower and the upper panels. The upper and the lower polarizers having the perpendicular polarizing directions are provided on the outer surfaces of the upper and the lower panels, respectively. The voltage value of a first gray representing the darkest state applied between the pixel electrode and the common electrode is within a voltage range giving a contrast ratio to be equal to or higher than 0.8 with respect to contrast ratio when the voltage applied between the pixel electrode and the common electrode is zero. In this way, the contrast ratio and the color reproduction is improved, so that the image quality of a liquid crystal display is improved.